ing and draining a localized abscess, and it is certain that leaving it in such cases is no bar to recovery. In general peritonitis, on the other hand, the only chance of averting a fatal result is the removal of the focus of infection and as much of the toxic products as possible. In other words, the appendix must be removed and all intestinal adhesions thoroughly separated in order to liberate and remove the collections of pus and lymph among the coils.

The abdomen he cleanses in all cases by means of sponges on holders, without the use of irrigation, which he has discarded.

Histological Study of the Varieties of Appendicitis.—Following the lines of his former work on this subject, PILLIET (*Le Prog. Méd.*, January 29, 1898) shows that the different forms of appendicitis may be classified according to the manner in which the follicles of that organ are affected by the process of inflammation.

Of calculous appendicitis he says:

1. The calculus is always composed of mucus and blood. Chemical analysis proves this and accords with the fact that mucus contains alkaline phosphates and carbonates. These calculi are therefore comparable to the calculi found in other organs of the body.

2. The appendicitis in itself is mild and prolonged. It is essential for the formation of calculi that the glands of Lieberkühn remain intact; that they are excited, but not destroyed. They can therefore coexist with recovery, though this form of appendicitis is, like all others, liable to acute exacerbations. It is generally, however, catarrhal in nature, in opposition to the acute ulcerating, perforating variety.

The so-called obliterant form of appendicitis is due to the destruction of the glandular tissues gradually and the formation of mucoid tissues in their place uniting the mucous membrane throughout, or it may be that the union takes place in the proximal portion only when its adhesion gives rise to the cystic variety. Gangrenous appendicitis is compared to the gangrenous form of dysentery, and is distinct from follicular lacerations.

Horseshoe Kidney Simulating Malignant Disease of the Abdomen.—OLIVER (*British Medical Journal*, February 26, 1898) reports an interesting case in which the symptoms exhibited by the patient pointed to malignant disease of the abdomen. A tumor was found in the median line that moved with respiration, produced pressure symptoms on the aorta, and seemed to have some connection with the symptoms of gastric disturbance displayed by the patient.

An exploratory incision showed a horseshoe-shaped kidney which rested upon the aorta and was slightly loosened from its median attachments.

The patient was relieved of all his troublesome symptoms by the operation. The author calls attention to the case as illustrating the fact that these abnormal kidneys must be taken into account in making a diagnosis in cases of tumors of the abdomen.

What Operation can do for Cancer of the Tongue.—In the study of one hundred and two cases of operation for cancer of the tongue in which he performed the primary operation, BUTLIN (*British Medical Journal*, February 26, 1898) found that he had operated upon nearly an equal number in hospital and private practice; he also found, after getting returns from all but seven cases, that, besides the fact that the mortality was greater immediately subsequent to the operation in the hospital cases, the number of absolute cures with freedom from return, in some cases for thirteen years, and in all for over three years, was much greater in the private than in the hospital cases.

The number of deaths due to operation in the hospital group is no fewer than nine, while he only lost one of his private patients in whom there was marked involvement.

The number of such patients alive and free from disease more than three years after operation, or who died from other causes after the expiration of three years, was seven in the hospital group and thirteen in the other group, and there are nine others free from return after one year, but not over three years, while there are only two hospital patients who may prove cures. The percentage of cures in the hospital group of cases at the best is sixteen, while in the private cases it is twenty-six, with a chance of its being much greater.

The reason for this difference in results is found in the fact that the private patients are better educated and come for operation much earlier than do the others, which fact illustrates the great advantage of early operation.

The study of the cases which may be claimed as cured shows that the disease, in the large majority of them, was situated in the anterior two-thirds of the tongue. That is only what has been suspected and suggested, but hitherto he has not been able to prove it by a sufficient number of cases. But even some of the worst cases may be cured if the disease has not invaded the tonsillar and neighboring regions.

Among the private patients cured there was not one in whom the glands were removed, while in the hospital cases, of the seven five had the glands removed at the time of the operation or immediately subsequent to it by a second operation, and in four or five they were not only enlarged, but proved by microscopical examination to be cancerous. The author does not believe that the removal of the entire tongue is essential to a successful operation. The whole tongue was removed in only one of his successful cases. There is ample proof that removal of a portion of the tongue is sufficient to cure a considerable percentage of patients and to save a much larger percentage of cases from recurrence in the mouth. The removal of the entire tongue as a routine operation can be justified only by proving, as far as it is capable of proof, that a very considerable proportion of the persons who suffer from recurrence in the mouth would have been preserved from that recurrence in the mouth had the entire tongue been removed.

The author always aims at removing the cancer with three-quarters of an inch of apparently healthy tissue around it in every direction. Where the disease is on the border of the tongue his routine practice is to remove half the tongue to an inch behind the margin of the disease. In cases in which the disease is near the tip or forepart of the dorsum, the forepart of the tongue is removed.

The question as to the prevention of secondary infection of the glands of the neck is one of great moment, and yet its solution is full of uncertainty. The author's tables show how frequently successful treatment of the cancer of the tongue has been spoiled by secondary affections of the glands which had appeared normal at the time of operation.

The expectant plan of treatment is full of uncertainty, as often the glands are so involved before it is possible to detect them that their removal is unavailing. On the other hand, it is difficult to say which group of glands will be involved, and consequently which should be immediately removed.

In spite of this uncertainty the author has become convinced of the necessity of a routine operation if cancer of the tongue is to be more successfully dealt with. He has employed during the past eighteen months the following operation, removing the entire contents of the anterior triangle of the neck: A very careful dissection of the triangle is made, so that the connective tissue and glands are all taken out in one continuous mass. Search is made between the muscles in front for one or two deeper-seated lymphatic glands, and the glands in front of the parotid gland and about the angle of the jaw are removed with the contents of the triangle. The submental and parotid glands are not so easily and certainly removed *en masse* in this operation as the submaxillary and carotid groups. This is done at a second operation, and not at the time of the excision of the tongue.

The Surgical Pathology and Treatment of Tuberculous Bone Disease.—NICHOLS (*Boston Medical and Surgical Journal,* January 27, 1898) finds that many observations prove that tubercular disease of the bones and joints is caused by the tubercle bacillus.

Injuries of moderate severity favor the production of the disease.

In bones the disease begins in the epiphysis, and is more extensive than appears on gross examinations. Hence, in operation for removal of the disease, a considerable margin of apparently healthy bone must be removed.

Tuberculosis of the joints is generally, if not always, secondary to tubercular disease in the epiphysis of adjacent bone.

Abscess formation is due to extension of the tubercular process to the soft parts. The contents and wall of the tubercular abscess are different from those of infectious abscesses. Partial removal of the abscess wall is harmful.

Repair is caused by the formation of fibrous tissue, which replaces and partly encapsulates the tubercular tissue. Repair may be incomplete. Fibrous tissue may produce fibrous anchylosis, or the tissue may become ossified and lead to bony anchylosis.

Paraplegia in Pott's disease is rarely due to direct bony pressure. Usually the pressure is caused by tubercular peripachymeningitis. Rarely the pressure causes degeneration of the cord.

In regard to the surgical treatment, CABOT (*Ibid.*) says that, accepting the proposition that in these cases of tubercular bone disease we are dealing only with the localized focus, and therefore the operation is necessarily incomplete, and that nature must even afterward do much to accomplish the cure, it is plain how important it is to the surgeon to do all in his power to improve the patient's general condition and so to arrange his operation as to obviate a long confinement in bed, if possible.

The removal of tuberculous material must be as thorough as it can possibly be made, the bony focus being always hunted up and entirely removed.